

or Scolopacidae. It is conceivable that the primitive Charadriiform types exhibited very similar characters to those of *Thinornis*, *Plegornis*, and certain extinct Pacific forms. It is also very possible that *Rhyuchwa* should occupy a similar position in regard to springing from the main Limicoline stem (see alternative position).

As regards the Attagidae, the ægithognathous type of palate and other very interesting features would seem to warrant the view that they occupy a somewhat similar position in relation to the Charadriiformes that the Hemipodes do to the Galliformes and other groups. If this view is correct, they cannot be included in the Charadriiformes, but would form an annectant group—the Attagi-morphs, equivalent to the Turnico-morphs.

I have been moved to give this provisional and preliminary survey of my present conception of the relations of the Charadriiformes in the hope that by so doing I might possibly interest ornithologists in the collection of material necessary to complete a satisfactory review and classification.

XXIX.—*On the Birds collected by Mr. A. F. R. Wollaston during the First Mt. Everest Expedition.* By N. B. KINNEAR, M.B.O.U. With Notes by Mr. A. F. R. WOLLASTON.

(Plate VII.)

INTRODUCTION.

THE collection of bird-skins brought back by Mr. Wollaston from the Everest Expedition consists of 258 specimens referable to 59 species*.

As pointed out by Mr. Wollaston in his introductory remarks, birds could not be collected everywhere on account of the religious susceptibilities of the Tibetans. In addition

* For a map of the route and localities visited see 'Geographical Journal,' lix. no. 2, Febr. 1922.

to birds he had to make collections in all branches of Zoology and Botany, and at the same time act as Medical Officer to the Expedition.

With the exception of a few freshly-moulted birds obtained in the autumn, all the specimens are in a very worn and faded state of plumage, which renders identification a matter of some difficulty in certain forms.

The collection is of considerable interest, as it is from a district of which we know nothing, though it is possible Hodgson's native collectors may have penetrated near to it in Nepal, but if they had actually hunted on the plains of Tibet surely the Brown Ground-Chough, Tibetan Skylark, or Elwes's Shore-Lark would have been known to Hodgson.

The nearest point on the east where any collections have been made is Khamba Dzong, at which place the Tibet Mission, under Sir Francis Younghusband, spent about two and a half months. Colonel H. J. Walton, I.M.S., the naturalist and medical officer to the Mission, collected assiduously and published the results of his observations on the birds of southern Tibet in 'The Ibis' for 1906. Colonel F. M. Bailey, who was for several years British Trade Agent at Gyantse, made some interesting notes on the breeding-birds in that part, which he published in the 'Journal of the Bombay Natural History Society.' To both these writers constant reference is made, and their notes have been of great service in preparing this paper. Mention must also be made of Blanford's paper on the Zoology of Sikkim in the Journal of the Asiatic Society of Bengal.

On the western side no birds have been observed or collected nearer than the Kumaon-Tibet border, where Dr. T. G. Longstaff shot a few specimens while on a mountain-climbing trip. The higher valleys of Garhwal have been worked, chiefly during the nesting-season, by Messrs. S. L. Whymper and B. B. Osmaston, and their observations recorded in the Bombay Journal. Stoliczka wrote a useful paper on the birds of the Sutlej Valley, Lahoul, and Ladak; and the western border of Tibet has been explored by many travellers and

naturalists, among whom may be mentioned Sir R. Strachey, Dr. A. L. Adams, Lord Gifford, and more recently by Dr. W. L. Abbott, Colonel A. E. Ward, and Mr. F. L. Ludlow.

The occurrence of such species as Prince Henry's Laughing Thrush, Godlewski's Meadow-Bunting, Red-headed Bullfinch, and Himalayan Siskin are of interest, as they show an extension of the previously known range.

Many of the altitudes at which Mr. Wollaston saw or obtained birds surpass all previous records, and those of migrating birds are interesting, since they give additional proof that birds on migration cross high mountain ranges. We already know from the writings of Henderson, Biddulph, and Scully that birds cross the Karakoram Range when migrating from Central Asia to India, but no small *Passeres* have ever before been observed as high as 20,000 ft., at which altitude Mr. Wollaston saw migrating Pipits and Redstarts on the side of Mt. Everest.

Of the birds seen or obtained by Mr. Wollaston, and not brought back, little can be said, but perhaps it may be of interest to add a few remarks on one or two of them :—

Ibidorhynchus struthersi. The Ibis-bill was first found nesting by Mr. S. L. Whymper in Garhwal at an elevation of 8000 ft. in May 1906, and in the same year Colonel Bailey took a nest near Gyantse at 13,000 ft., while a few years later he found it breeding in the Chumbi Valley.

Milvus melanotis. The Black-eared Kite breeds at Gyantse, and was seen by Biddulph on the Karakash at over 16,000 ft.

Rostratula capensis. Mr. Wollaston, who is well acquainted with this bird in Africa, tells me that he was quite close to it, and in fact had a shot at it with his .410 collecting-gun. The Painted Snipe is generally considered a bird of the plains, though, according to Mr. Stuart Baker, it has been found up to 5000 ft. in the Khasia Hills.

NOTE BY MR. WOLLASTON.

Owing to a series of misadventures no collecting was possible until 13 June, when I returned from Lachen (Teesta Valley) in Sikkim over the Sepo La into Tibet. A further reason for the somewhat scanty nature of this collection lay in our unwillingness to hurt the religious susceptibilities of the Tibetans. According to the Buddhist belief it is a sin to take life of any sort or kind, so we were careful to avoid shooting in the neighbourhood of villages and monasteries, which meant the exclusion of a very large proportion of the country.

The month of June and the early part of July was spent in typical Tibetan country at altitudes between 14,000 and 16,000 ft.; wide stony plains with very sparse and stunted vegetation, few plants being more than six inches in height; Larks, Mountain-Finches, Ground-Choughs, and Rose-Finches are the most characteristic birds of these wastes. On the rounded limestone hills (16,000–18,000 ft.) rising out of the plains are found the Tibetan Partridge, the Tibetan Snow-Partridge, and in the ravines are the Hill Rock-Dove, Crag-Martin, and Siberian (White-rumped) Swift. At intervals on the plains are wide meres, overflows from rivers, which in the summer are frequented by Bar-headed Geese, Ruddy Shelduck, Garganey, Redshank, Common Tern, Sand-Martin, Sea-Eagle, and Brown-headed Gull. A pair of White Storks was seen on 15 June, and Black-necked Cranes were not uncommon near Tingri. Pochard, Wigeon, and Gadwall were seen in large numbers on the meres in October. Up to the second week of July the weather was almost uninterruptedly fine and rainless; a strong wind, which blew daily from 10 A.M. onwards, raising clouds of dust and sand, interfered somewhat with collecting. Nearly all the specimens collected after 20 June were very much worn in plumage.

Between 10 July and 3 August we visited a quite unknown district south-west and south of Tingri. During this excursion we found ourselves at altitudes as low as 12,000 ft.,

in a country much more Nepalese than Tibetan in character. Birds noticeable in that region were the Himalayan Greenfinch, Indian Tree-Pipit, and White headed Dove. In a valley near Nyenyam at 14,000 ft. I found a pair of Ibis-bills (*Ibidorhynchus struthersi*), which appeared by their behaviour to have young birds on an island in the river; unfortunately the water was too deep and swift to make a crossing possible.

The country in the neighbourhood of Kharta (12,000 ft.), about 25 miles east of Mt. Everest, is partly dry Tibetan and partly wet Nepalese in character. The month of August was spent at Kharta, whence we made excursions south to the Kama Valley, descending to an altitude as low as 9000 ft. In the month of September we ascended the Kharta Valley, making camps at 17,000 ft., where a considerable number of birds were collected, at 20,000 ft., and at 22,400 ft., in the immediate vicinity of Mt. Everest. It is interesting to note that at our 17,000 ft. camp, besides Temminck's Stint, of which a specimen was obtained, the Painted Snipe and Pin-tailed Snipe were both seen, and other migrating birds were heard passing over at night, the cries of Curlews and Godwits being clearly recognisable.

Among the more conspicuous species, of which specimens were not obtained, may be mentioned the following:—Magpie: a pair or two generally to be found near most villages, breeding at Khamba Dzong, June. Raven: very common in all villages, seen up to 21,000 ft. on Mt. Everest. Alpine Chough: common in rocky valleys, seen at 20,000 ft. on Mt. Everest. Himalayan Vulture: in the gorges of the main Himalayan range up to 14,000 ft., not seen on the Tibetan plateau, where its place is taken by the Lammergeier, of which a pair or two may be seen in every district above 14,000 ft. From our camp at 22,400 ft. on Mt. Everest, a Lammergeier was seen flying high over the top of a peak of not less than 24,000 ft. Black-eared Kite: fairly plentiful about villages in Arun Valley: one of these birds frequented our camps in the Kharta Valley up to 17,000 ft., but did not appear to venture farther.

It is greatly to be regretted that the Expedition which is visiting Mt. Everest this year has been forbidden to take firearms of any description.

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LIST OF SPECIES OBTAINED.

Lerwa lerwa (Hodgs.).

325 ♂ 28.8.21 Chog-la 17,000 ft.

The Snow-Partridge is found throughout the higher Himalaya eastwards to China.

[Not seen below 17,000 ft.—A. F. R. W.]

Columba leuconota leuconota Vigors.

284 ♂ 12.8.21 Kharta 12,500 ft.

The Snow-Pigeon occurs throughout the Himalaya up to 15,000 ft. in summer, and sometimes as low as 4000 ft. in winter.

[Inhabits the gorges of the main range up to 12,500 ft., above which altitude and on the Tibetan plain its place is taken by *Columba rupestris*.—A. F. R. W.]

***Sterna hirundo tibetana* Saunders.**

155 ♀ 24.6.21 Tingri 14,000 ft.

The Tibetan race of the Common Tern was reported to be abundant on all streams and lakes visited by the Tibet Mission in 1904. Farther west, Dr. Abbott met with it at the Tso Morari Lake, Ladak, 15,000 ft., in July, and Henderson says it breeds at Gohra at 16,000 ft. Arnold Pike procured two specimens in the beginning of July at Horpa Tso, lat. N. $34^{\circ} 35'$, long. E. $81^{\circ} 0'$, as high as 17,285 ft.

[Generally distributed wherever there are rivers on the plains. Seen fishing at the exit of a river from a glacier at 16,000 ft. north of Mt. Everest.—A. F. R. W.]

***Cirrepedesmus mongolicus atrifrons* (Wagler).**

151 ♂ 23.6.21 Tingri 14,000 ft.

Neither Colonel Walton nor Blanford met with this Plover in Tibet or Sikkim, and little seems to be known of its distribution on the southern limit of its breeding-range. Colonel Bailey found a Plover nesting at Tangla at an elevation of 15,000 ft., which he doubtfully identified with this bird, and in the National Collection there are two skins obtained by Mandelli's native collectors labelled "Tibet 1876." Where exactly Mandelli's men collected, it is impossible to say, but probably near the Sikkim Frontier. Ten miles north-west of Rakas Tal in western Tibet, a little north of the Kumaon border, Dr. T. G. Longstaff procured three specimens (a male, female and downy chick) at 15,000 ft., and on the label of the male he notes "a few pairs found breeding, also probably breeding at Tirthipasi, W. Tibet." Henderson obtained a male at Sagra, Ladak, in August at 16,000 ft., and in the same country A. L. Adams saw old birds and young of what he calls the "rufous-breasted dottrei" (*C. leschenaulti*), but probably this species. Near the Tso Morari Lake M. Babault saw old and young in July. Much farther north, in western Tibet, Arnold Pike met with this Plover in June near Horpa Tso at 17,000 ft.

[Breeding in June on shingly terraces, 15,000–16,000 ft.—A. F. R. W.]

***Pisobia temmincki* (Leisl.).**

357 ♂ 15.9.21 E. Everest 17,000 ft. ; 377 ♂ 21.9.21 E. Everest 17,500 ft.

Temminck's Stint is a common winter visitor to the plains of India, arriving in October or earlier. At Leh, Biddulph met with it in the first week of September, and Scully says it arrives in the Katmandu Valley, Nepal, about the middle of the same month, while in the North-West Frontier Whitehead did not see it till the end of October.

Both Henderson and Stoliczka considered that this Stint bred in Yarkand, where Biddulph shot birds as late as 22 May, but it is sometimes found farther south at even a later date, and M. Babault obtained one on the borders of the Tso Morari Lake on 21 July.

Buturlin, as quoted by Dresser in his 'Eggs of the Birds of Europe,' says "Temminck's Stint does not breed farther south than the south-west part of the Tomsk Government in 51° lat."

[Several seen on migration in September about 17,000 ft. in Kharta Valley.—A. F. R. W.]

***Tringa totanus eurhina* (Oberholser).**

154 ♀ 24.6.21 Tingri 14,000 ft.

This form of Redshank was described by Mr. Oberholser in 1900 from specimens obtained by Dr. Abbott at the Tso Morari Lake, Ladak, 15,000 ft., where it breeds. According to Colonel Bailey, it also nests at Gyantse and in the Chumbi Valley.

[Breeding in June in marshy places everywhere on Tibetan plains.—A. F. R. W.]

***Tringa erythropus* (Pall.).**

139 ♂ 17.6.21 Tingri 13,500 ft.

This unsexed specimen of the Dusky Redshank is a young bird of the previous year in first breeding-plumage. Mr. Wollaston tells me that the bird was brought to him by a young Tibetan boy under cover of night. The boy promised to come back next morning and point out the nest, but he

never returned. Whether this was because he had taken life and was frightened of being found out or because the story was false, Mr. Wollaston was unable to say.

***Athene noctua bactriana* Blyth.**

198 ♂ 5.7.21 Tingri 14,000 ft.

Hutton's Owlet has been recorded up to 15,200 ft. in southern Tibet, and, as Colonel Walton has pointed out, the specimens from that country are rather large. Three males and two unsexed skins from Tibet have wings of 175–185 mm. as compared with 164–167 in four males from Afghanistan and 157–170 in five from Turkestan.

[A pair of these birds had a nest in the old fort at Tingri; their food seemed to consist principally of voles.—A. F. R. W.]

***Upupa epops orientalis* Stuart Baker.**

162 ♀, 163 ♂ 27.6.21 Tingri 14,000 ft.

It seems surprising that a bird of such weak flight as the Hoopoe should be seen at an altitude of 21,000 ft. There are, however, a number of records of this bird at high elevations while on migration, and I give details of some of the highest.

In north-east Sikkim a Hoopoe was seen in the autumn by Blanford at Momay Samdong, 15,000 ft., Stoliczka met with one between 15,000–16,000 ft. in Rupshu, and on the Karakoram Pass Scully records a bird at over 18,000 ft. Henderson, writing of this species, states "In the barest deserts ... the Hoopoe would occasionally be met with," and he adds that he saw one at the top of the Tagalung Pass, 16,000 ft. In his paper on "The Birds of Eastern Turkestan," Biddulph mentions seeing a Hoopoe on Dipsang between 16,371–17,817 ft.

[Common everywhere up to 16,000 ft., nesting in villages and monasteries. A Hoopoe was several times seen flying over a glacier at an altitude of about 21,000 ft. in September.—A. F. R. W.]

***Clamator jacobinus jacobinus* (Bodd.).**

174 ♂ 20.6.21 Tingri 14,000 ft.

The occurrence of the Pied Crested Cuckoo at such an

altitude as 14,000 ft. is very remarkable, since it is generally considered to be a bird of the plains, though Biddulph obtained an example at 5000 ft. in Gilgit in June.

The only other instance I have been able to find of this Cuckoo at a high altitude is in M. Babault's report on the collection of birds he made in the Himalaya, where mention is made of a specimen obtained near Rohla (Rotang), Lahul, at an elevation of 12,000 ft.

[The only specimen obtained was being mobbed by a number of Sparrows, when it was caught by the hand of my Lepcha collector.—A. F. R. W.]

Cyornis tricolor tricolor (Hodgson).

313 ♂ 25.8.21 Kama Valley 12,000 ft.

The correct name of the Slaty-blue Flycatcher is *tricolor* of Hodgson (P. Z. S. 1845, p. 26) and not *leucomelanurus* of the same author.

This bird is found from Kashmir to Sikkim and northern Assam, but some specimens from the two last localities have a rusty tinge on the underside and are intermediate between the true white-bellied *tricolor* and *cerviniventris* Sharpe, in which the underside is rust-coloured. According to the material in the British Museum, *C. tricolor cerviniventris* is found in Manipur—the type comes from Remta in that State.—Mt. Victoria, the N. Chin Hills, and S. Shan States. Specimens from Yunnan and Kansu are intermediate like certain Sikkim birds, and so too are some skins from Sadya, the Miri and Khasia Hills.

Birds from Kashmir and Kumaon appear rather different to typical specimens, and with more material may prove to be a separate race.

Trochalopteron henrici Oustalet.

263 ♀, 264 ♂ Kharta 12,000 ft. ? Bill grey, feet brown.

Prince Henry's Laughing Thrush was described by Oustalet from specimens collected by Prince Henri d'Orleans at So in eastern Tibet, and the only example in the Natural History Museum is a female, obtained by

Colonel F. M. Bailey, in June 1913, at Shako, south-east Tibet. A specimen was obtained by Colonel Waddell at Chaksam in the Tsang Po Valley during the Tibet Mission, and was erroneously described as new by Dresser in the P. Z. S. for 1905, under the name of *Garrulax tibetanus*. This bird appears to be confined to south-east Tibet and the Valley of the Tsang Po, from whence it has probably spread into the upper sources of the Arun River, and Mr. Wollaston's specimens extend the range considerably to the westward. It is rather surprising that *T. affinis affinis* was not met with, since it is found in Nepal, very common in the Chumbi Valley, and Blanford obtained specimens at an elevation of 13,000 ft. in Sikkim.

[Locally in the Arun Valley and its branches, up to 13,000 ft. This bird has a wonderful diversity of song, and is revered as sacred by the Tibetans.—A. F. R. W.]

Troglodytes sp. ?

256 imm. 28.7.21 Puse La 16,500 ft.

Unfortunately the single specimen obtained by Mr. Wollaston is a young bird, and one would hardly be justified in giving it a name, though it is very much darker than *T. nipalensis* of about the same age, and without doubt belongs to an undescribed form.

[Found only in mountainous regions between 16,000 and 18,000 ft., where it lives amongst the large boulders of moraines. It is exceedingly difficult to collect, as the bird when shot is liable to fall into crevices between immovable boulders—of four birds shot, only one (immature) was secured. The song is similar to, but easily recognisable from, that of the Common Wren.—A. F. R. W.]

Cinclus cinclus cashmirensis Gould.

262 imm. 1.8.21 Chulungphu 13,000 ft.; 379 ♂, 380 imm., 381 imm. 11.8.21, 307 ♂ 20.8.21 Kharta 12,000 ft.

In the P. Z. S. for 1859 Gould described two Dippers (*Cinclus cashmirensis* and *C. sordidus*), both of which were obtained by A. L. Adams near the Tso Morari Lake in Ladak.

Dr. Hartert treats *sordidus* as a synonym of *cashmirensis*, considering it merely a dark phase, and *C. younghusbandi* of Walton appears to be the same.

The specimens brought back by Mr. Wollaston tend to confirm the above view, since nos. 379, 380, and 381 were all obtained on the same day, close to one another, and apparently belong to the same brood. The first is a young example of the ordinary *cashmirensis*, the other two are dark like *younghusbandi*.

[Seen near all the fast-running streams from 12,000–17,000 ft.—A. F. R. W.]

***Planesticus merula maxima* (Seeböhm).**

261 ♂ 1.8.21 Chulungphu 13,800 ft.; 302 ♂ 18.8.21 Karta 12,500 ft.; 331 ♀ 31.8.21 Karta 12,000 ft.

The type of the Himalayan Blackbird is an immature male collected by Jordon at Gulmerg in Kashmir in August 1867. The examples of this bird in the National Collection consist of three skins from Kashmir, one from the Kangan Valley, Hazara, one from the Kurram Valley, and a male shot by Colonel Walton at Ganthong in the Chumbi Valley, 12,000 ft. This Blackbird is confined to the Himalaya and Kashmir, and north of the Karakoram Range it is replaced by a smaller form—the Central-Asian Blackbird, *P. m. intermedius*, described by Dr. Richmond from Aksu in Chinese Turkestan. Mr. S. L. Whympers found the Himalayan Blackbird breeding as high as 13,000 ft. in the Nila Valley, Garhwal, and Whitehead mentions that he found nests between 10,000 and 12,000 ft. in the Kurram Valley.

[Found only in the valleys of the main range below 13,800 ft. The song is much harsher than that of the Common Blackbird.—A. F. R. W.]

***Monticola solitarius pandoo* (Sykes).**

309 ♀ 21.8.21 Kharta 12,500 ft.

This form of the Blue Rock-Thrush is found in the breeding-season from Afghanistan and perhaps farther west to China and Tibet. It was not met with by any of the members of

the Tibet Mission. The nest of the Eastern Blue Rock-Thrush has been found as high as 13,500 ft. in Garhwal.

[One pair only seen at Kharta.—A. F. R. W.]

***Lioscopus collaris nipalensis* (Blyth).**

257 juv. 28.7.21 Puse La; 312 ♂ 24.8.21 Kama Valley 14,000 ft.; 337 ♂ 6.9.21 Upper Kharta Valley 17,000 ft.; 350 juv. 16.9.21, 362 ♂, 363 ♀ 17.9.21, 370 ♀ 18.9.21, East Everest 17,000 ft.; 370 ♂ 20.7.21 East Everest 18,500 ft.

Three forms of this Alpine Accentor have been recorded from the Himalaya, as follows:—(1) *L. c. rufiliatus*, breeding in the Safed Koh, Kashmir, and Central Asia, in winter found at Simla and probably other places in the Himalaya; (2) *L. c. whymperi* described from Garhwal; and (3) *L. c. nipalensis*, ranging from Kumaon eastwards till replaced by other races in Yunnan and eastern Tibet.

The status of *L. c. whymperi* is, I consider, very doubtful. It was originally described by Mr. Stuart Baker from three specimens obtained by Mr. S. L. Whymper in Garhwal, and presented by him to the Bombay Natural History Society, and is said to have a rufous wash on the head, neck, and underparts. This rufous colour is, I am certain, not natural, and due to discoloration, probably caused by the preservatives used, since there are in the Bombay collection a number of other skins of Mr. Whymper's with the same stain. It is significant, too, that in the National Collection there is a normally-coloured skin of *nipalensis* obtained by Dr. T. G. Longstaff in Kumaon adjoining Garhwal.

As regards size, the wings of the three skins examined by Mr. Baker ranged from 85 to 92, Dr. Longstaff's bird is 90, and a winter specimen from Simla is 100 mm., while eleven true *nipalensis* from Sikkim vary between 91 and 103, and five of Mr. Wollaston's specimens are also within these last measurements.

Along with the Indian Redstart this bird was obtained at 18,500 ft. on the east of Mt. Everest, the greatest elevation from which any specimens were actually brought back.

A nest of this Accentor was found by Mr. Whymper in the Nila Valley, Garhwal, at 15,000 ft., and in June Dr. Longstaff shot a specimen at the same elevation near Johor, Kumaon, but he does not say whether it was breeding or not.

[Generally distributed on the main range about 15,000 ft. Two of these birds were observed creeping about crevasses of a glacier at an altitude of about 21,000 ft. E. Mt. Everest. —A. F. R. W.]

***Prunella fulvescens fulvescens* (Severtz.).**

233 ♂ 16.7.21, 236 ♂ 15.7.21, Nyenyam 13,500 ft.; 269 o 9.8.21 Kharta 12,000 ft.

According to Colonel Walton this Accentor breeds at Gyantse, but is not found at Juna, just north of the Chumbi Valley, in the winter.

***Prunella strophiatatus strophiatatus* (Blyth).**

244 ♂, 245 imm. 18.7.21 Nyenyam 14,000 ft.; 255 ♂ 26.7.21 Lepitu Kang 15,500 ft.

The Rufous-breasted Accentor was described by Blyth from Nepal, and during the breeding-season is found from southern Tibet and Sikkim to Garhwal, where Mr. B. B. Osmaston recently recorded it nesting in the Gerthi Valley on the Tibetan border at 13,500 ft. West of that it is replaced by another form, *P. s. jerdoni*, which ranges to Gilgit, but both races are found in the winter in Simla and Kumaon.

***Prunella rubeculoides* (Moore).**

216 ♀ 10.7.21 Tingi 14,000 ft.; 258 ♂ 28.7.21 Puse La 16,500 ft.; 345 ♂ 9.9.21, 360 ♂ 16.9.21 E. Everest 17,000 ft.

This Accentor is widely distributed and extends from Kashmir to Kansu. Colonel Walton says it was common throughout southern Tibet, and in the beginning of July Colonel Bailey found it nesting near Dochen at an elevation of 15,500 ft.

***Chimarrhornis leucocephalus* (Vigors).**

293 ♂ 15.8.21 Kharta Valley 12,000 ft. ; 329 ♂ 29.8.21 Chog La 15,500 ft.

The White-headed Redstart, according to Colonel Bailey, is very common and nests in the Chumbi Valley at 11,000 ft., but was not observed by the members of the Tibet Mission beyond Phari. On the Lanier Pass in Rupshu Stoliczka saw this Redstart at 17,500 ft.

[Found on the banks of torrents from 9000 to 16,000 ft. ; very seldom seen more than a few yards from water.—A. F. R. W.]

***Phoenicurus ochrurus rufiventris* (Vieill.).**

252 imm. 13.7.21 Thungla 15,000 ft. ; 240 ♀ 17.7.21 Nyenyam 13,000 ft. ; 272 imm. 11.8.21, 291 ♂ 15.8.21, 292 ♀ 15.8.21, 308 ♂ 20.5.21, 311 ♂ 20.8.21, Kharta 12,500 ft. ; 327 imm. 28.8.21 Khama Valley 15,000 ft. ; 334 imm. 4.9.21 Kharta Valley 12,500 ft. ; 361 ♂ 16.9.21, 367 ♂ 18.9.21, E. Everest 17,000 ft. ; 380 ♂ 23.9.21 E. Everest 18,000 ft. ; 382 ♂ 24.9.21 E. Everest 18,500 ft.

Nests near Rham-tso at 14,700 ft. and probably up to 15,000 ft., as skin No. 327 is that of a young bird not long out of the nest.

Blanford noticed this Redstart on migration near Samdong, 15,000 ft., in northern Sikkim in the autumn, but no other observer has recorded it from so high an elevation as Mr. Wollaston.

[Nests and young birds found in several places in June. Large numbers on migration in September up to 20,000 ft., Mt. Everest.—A. F. R. W.]

***Phoenicurus erythrogaster grandis* (Güld.).**

260 ♂ 29.7.21 Kiprak 16,200 ft. ; 335 imm. 6.9.21 Upper Kharta Valley 16,000 ft. ; 343 ♂ 7.9.21 Upper Kharta Valley 17,200 ft. ; 347 ♀ 9.9.21 Everest 17,000 ft. ; 350 ♂ 11.9.21, 352 ♂, 365 ♀ 12.9.21, E. Everest 17,500 ft.

I can find no record of Gldenstadt's Afghan Redstart breeding in the Himalaya or Kashmir, and Colonel Walton was unable to say whether it bred in southern Tibet. He shot

specimens during September and October at Khamba Dzong, 15,200 ft., and at Tuna, 15,000 ft., he got one in February, while Blanford says that he never met with it in north-eastern Sikkim in the autumn below 14,000 ft. Henderson saw this Redstart as high as 17,800 ft. in the snow in the Changla Pass, Baltistan, and Scully mentions it as common in August and September on the mountains of Chinese Turkestan at from 10,000 to 18,000 ft.

***Saxicola torquata indica* (Blyth).**

270 imm. 9.8.21, 276 imm. 11.8.21 Kharta 12,000 ft.; 366 ♂ 17.9.21, 378 ♀ 21.9.21, E. Everest 17,000 ft.: 387 ♀ 1.10.21 Kharta 12,000 ft.

Numbers of this Chat were met with by Colonel Walton between Gyantse and Lhasa during the summer, and up to the middle of October it was still to be seen at Khamba Dzong, 15,200 ft. In September and October Blanford saw it, apparently on migration, in the higher parts of Sikkim.

Skin no. 270 is in nesting-plumage, so probably this Chat breeds at Kharta.

[Large numbers were seen, apparently migrating, at and about 17,000 ft., Kharta Valley, in September.—A. F. R. W.]

***Ænanthe deserti oreophila* (Oberholser).**

157 ♂ 25.6.21, 175 ♂ 30.6.21, 195 ♂ 5.7.21, 206, 207 juv. 7.7.21, 217 ♂ 10.7.21, Tingri 14,000 ft.

Breeds at Gyantse at 13,000 ft., but not common farther north. Dr. Abbott found it breeding at Gya, 15,000 ft., and Debring, 16,000 ft., in Kashmir, and Stoliczka obtained examples in the vicinity of Karzag, Rupshu, between 15,000 and 17,000 ft.

***Grandala cœlicolor* Hodgson.**

260 ♂ imm. 29.8.21 Chog La 16,500 ft.

The single example of Hodgson's *Grandala* shot by Mr. Wollaston is a young male in an interesting stage of plumage. In this bird the blue feathers of the adult are beginning to appear on the rump, wing-coverts, flanks, and

breast. There is a similar skin from Nepal in Hodgson's collection, but unfortunately it is without any date. Oates's suggestion that the young male assumes the blue plumage at the first autumn moult seems doubtful, since Mr. Wollaston's specimen appears to be a bird of the previous year.

Hodgson described this species from Nepal, and it is found from Garhwal to Kansu always at considerable elevations. In Sikkim Blanford first met with it on Momay Samdong at an altitude of 15,000 ft., and later on in the autumn saw a flock near the Donkia Pass about 17,000 ft.

In Garhwal Mr. S. L. Whympers discovered two nests with young in July at 16,700 ft. in the Nila Valley, and in the following year his native collector took two eggs in June at the same place—the first-recorded eggs.

A small flock of these birds were observed by Mr. Osmaston in the early part of June, feeding close to the melting snow in the Tons Valley, at 13,000 ft., but though several of the birds had paired he was unable to find a nest.

This bird has received considerable notoriety in the daily press, owing to its having been reported from time to time as a "Blue-Bird." What the playwright's "Blue-Bird" was does not concern us here, but it is the name ordinarily used for the North American bird *Sialia sialis*.

[A flock of fifty or more seen on Chog La between the Kharta and Kama Valleys.—A. F. R. W.]

***Tribura thoracica* (Blyth).**

321 ♂ 26.8.21 Popte La 12,000 ft.

The Spotted Bush-Warbler has been found breeding in Nepal and Sikkim, and is fairly common in parts of Garhwal, according to Mr. Osmaston, frequenting open grassy places in summer up to 12,500 ft. Mr. Whympers took nests in the Nila Valley of the same district at 12,000 ft.

***Phylloscopus affinis* (Tickell).**

285 ♂, 239 ♀ 15.7.21, 241 ♀ 17.7.21, Nyenyam 13,500 ft.;
275 ♂ 11.8.21, 356 ♂ 19.8.21 Kharta 12,500 ft.

Tickell's Warbler is found during the breeding-season from

Kashmir to Kansu, and, according to Colonel Walton, "is by far the most common Leaf-Warbler in S. Tibet," remaining as late as the second week of October at Khamba Jong, 15,200 ft. In September Stoliczka obtained specimens at Chagra, Ladak, 15,564 ft. Colonel Bailey took nests at Gyantse, 13,500 ft., and in Garhwal Mr. Osmaston has recorded that it breeds in considerable numbers at the same elevation, while in Ladak Colonel Ward found it nesting up to 14,000 ft.

? *Phylloscopus inornatus inornatus* Blyth.

322 ♂ 26.8.21 Popti La 12,000 ft.

This single skin is in a very worn condition, and it is impossible to say whether it belongs to the above form or *P. i. mandelli*.

Phylloscopus fuligiventer (Hodgson).

314 ♀ 24.8.21 Kama Valley 12,000 ft.

The specimens of the Smoky Willow-Warbler in the Natural History Museum are from Nepal and Sikkim during the breeding-season, and the Naga Hills, Sadiya, and Buxa Duars in the winter. This Warbler was obtained by Blanford near Momay Samdong in northern Sikkim in rhododendron-scrub at an elevation of about 14,000 ft.

Lanius schach tephronotus Vigors.

272 ♂ 10.8.21, 296 ♂, 297 ♀, 298 imm. 17.8.21, 363 imm. 18.8.21 Kharta 12,500 ft.

The Grey-backed Shrike was reported by Colonel Walton to be very common at Gyantse, in the valley of the Tsang Po, and at Lhasa, and Colonel Bailey found it nesting near Kangmar, south Tibet, at 14,000 ft.

An immature example of this Shrike, shot by Colonel Waddell near Chaksam on the Tsang Po, was described by Dresser in the P. Z. S. for 1905 as a new species under the name of *Lanius lhama*.

[Found in the Arun and similar valleys below 13,000 ft.—
A. F. R. W.]

***Pariparus rufonuchalis beavani* (Jerdon).**

323 ♂, 324 o 27.8.21 Kama Valley 12,000 ft.

The Sikkim Black Titmouse is found from Szechuan and Kuku Nor to Nepal, and from Kumaon westwards it is replaced by the typical form *P. r. rufonuchalis*.

In the Chumbi Valley, according to Colonel Walton, this Tit is not uncommon, and Blanford and Mr. Elwes met with it up to 13,000 ft. on the Chola Range, Sikkim.

On an average, birds from Nepal, Sikkim, and south Tibet are larger than those from Yunnan, Szechuan and Kuku Nor; twenty-five specimens from the former localities have wings measuring 66 to 73 mm., average 70.4, while ten from the latter range from 63 to 70 mm. with an average of 66. Unfortunately, the material in the Museum is lacking in properly sexed specimens.

[Only found in Kama Valley, south-east Mt. Everest, in juniper forest from 10,000–13,000 ft.—A. F. R. W.]

***Anthus richardi striolatus* Blyth.**

344 ♂ 3.9.21 Upper Kharta Valley 17,000 ft.; 354 ♂ 12.9.21 East Everest 17,000 ft.; 368 ♂ 18.9.21 East Everest 17,000 ft.; 372 imm. 19.9.21, 374 ♂ 20.9.21, 376 ♀ 21.9.21 East Everest 17,500 ft.; 384 ♂ 26.9.21, 385 o 27.9.21, 386 ♂ 27.9.21, South-east Everest 16,500 ft.

Blyth's Pipit does not breed in the Himalaya, though nests have been found in the Khasia Hills, Assam, and some of the Burmese Hills. Small numbers of this Pipit were seen by Colonel Walton at Khambra Dzong in September, and in the same month and also in October Blanford met with it in northern Sikkim at from 7000 to 15,000 ft.

[Seen on migration in Arun and Kharta Valleys in September. Several of these birds frequented our camp at 20,000 ft. East Mt. Everest.—A. F. R. W.]

***Anthus roseatus* Blyth.**

273 10.8.21, 301 ♂ 18.8.21 Kharta 12,500 ft.; 328 ♂ 28.8.21 Kharta Valley 15,000 ft.

In the breeding-season Hodgson's Pipit is found from the

Himalaya northwards, but no one had previously observed it in southern Tibet. In Sikkim and along the Himalaya this Pipit nests at high altitudes, and Mr. Osmaston found it breeding up to 12,500 ft. in Garhwal.

Blanford saw this bird at 15,000 ft. in Sikkim in the autumn.

***Anthus hodgsoni* Richmond.**

246 ♂ 18.7.21 Nyenyam 13,000 ft.; 247 ♀ 8.7.21 Nyeynam 14,000 ft.; 300 ♀ 18.8.21 Kharta 12,500 ft.; 315 ♂ 23.8.21 Kama Valley 10,000 ft.; 375 ♂ 20.9.21 East Everest 17,500 ft.

Dr. Richmond has pointed out that the name *Anthus maculatus* Jerdon is preoccupied, and in future the Indian Tree-Pipit must be known as *Anthus hodgsoni* Richmond.

The breeding-range is from Siberia and China to the Himalaya, where, as a rule, it is found nesting lower down than *A. roseatus*. Colonel Walton obtained specimens both at Lhasa and Khamba Dzong in September, when probably on migration, and in the same month Blanford saw birds passing down the Sikkim valleys.

[Appeared to be breeding in Nyenyam Valley in July. The song is almost indistinguishable from that of the Tree-Pipit.—A. F. R. W.]

***Budytes citreola citreola* (Pall.).**

167 ♀ 28.6.21, 214 ♀ 9.7.21 Tingri 14,000 ft.

Colonel Walton found the Yellow-headed Wagtail a common bird throughout southern Tibet. No. 214, which was shot off the nest, is in the immature grey plumage.

[Occasionally seen in marshy places. Nest with fresh eggs found near Tingri at the beginning of July.—A. F. R. W.]

***Motacilla alba leucopsis* Gould.**

381 ♂ 24.9.21 East Everest 17,500 ft.

This Wagtail breeds in northern Tibet, Mongolia, and Manchuria, and passes through southern Tibet on migration to the plains of India.

Motacilla alboides Hodgson.

191 ♂ 6.7.21 Tingri 14,000 ft.; 251 juv., 252 ♂ 18.7.21 Nyenyam 14,000 ft.; 267 ♂ 8.8.21 Kharta 12,500 ft.

As pointed out by Mr. Oberholser in the Proc. U.S. Nat. Mus. vol. xxii. p. 222, *Motacilla alboides* Hodgson is the correct name for the Wagtail generally known as *M. hodgsoni* Blyth. As a breeding species Hodgson's Pied Wagtail is found from Kashmir along the Himalaya to Tibet.

[Commonly seen along all rivers between 12,000 and 15,000 ft.—A. F. R. W.]

Otocoris alpestris elwesi Blanford.

136 ♂ 18.6.21 Jelep 15,500 ft.; 138 ♀ 14.6.21 Khamba Dzong 15,000 ft.; 146 ♀ 18.6.21 Chasha 13,500 ft.; 163 ♂, 164 ♂ 27.6.21, 170 ♂ 28.6.21, 178 ♂, 179 ♂, 180 ♀, 182 ♂, 181 ♀ 2.7.21, 185 imm. 3.7.21, 188 ♀, 189 ♂, 190 ♂, 191 ♀ 4.7.21, 212 ♀ 8.7.21 Tingri 14,000 ft.; 342 imm. 6.9.21 Upper Kharta Valley 17,000 ft.; 364 ♀ 20.9.21 Tingri 17,300 ft.

Elwes's Shore-Lark is a common bird of the higher and bleaker parts of Tibet, where it was found breeding by Colonel Bailey near Tangla at 15,200 ft. Mr. Wollaston obtained eggs at Tingri, 14,000 ft., but probably it nests up to at least 17,000 ft., since skin no. 342, which was procured in the Upper Kharta Valley at that elevation, is in nestling-plumage. The type of this Shore-Lark was obtained by Messrs. Elwes and Blanford near the Kangra Lama Pass on the borders of Sikkim and Tibet at between 15,000–16,000 ft., and they also met with it up to 18,000 ft. on the Donkia Pass.

[Common on the plains and seen as high as 17,000 ft., East Mt. Everest. Nests with young were found on 3 June, when snow was still on the ground.—A. F. R. W.]

Melanocorypha maxima Gould.

141 ♂ 17.6.21 Tinki Dzong 13,500 ft.; 200, 201 juv. 6.7.21, 210 ♀ 8.7.21, 211 ♂ 8.7.21, 218 ♀ 11.7.21, 219 ♂ 11.7.21, 220 ♀ 13.7.21, 221 ♂, 222 ♀ 11.7.21 Tinki Dzong 14,000 ft.

The Long-billed Calandra Lark is confined to the country between Kansu and the northern borders of Nepal and Sikkim. Two of Mr. Wollaston's skins, nos. 200 and 201, are in nestling-plumage. This Lark was seen up to 15,200 ft. by Colonel Walton.

[A conspicuous bird on the open plains, 14,000 to 15,000 ft. This Lark is occasionally kept in cages by the Tibetans, who call it the Mocking-bird on account of the great variety of its song.—A. F. R. W.]

***Alauda inopinata* Bianchi.**

136 ♂ 14.6.21 Khamba Dzong 15,000 ft.; 183 ♂, 184 ♀ 3 7.21, 203 ♂ 6.7.21, 208 ♀, 213 ♂ 8.7.21, 220 ♀, 221 ♂, 222 ♀ 11.7.21 Tingri 14,000 ft.

This Skylark appears to be resident in Tibet, and I have been unable to find any record of its occurrence elsewhere. The shape of the wing is different in this bird to that in the *arvensis* group of Larks, and I think for the present it should certainly be kept as a distinct species. In the Natural History Museum there are four skins of *Alauda gulgula guttata* collected by Mandelli's native collectors in Tibet in May and one from Sikkim in June. They are rather more rufous than birds from Kashmir, more the colour of *caliova*. It would be interesting to know whether this Lark breeds in Sikkim or Tibet.

[Occasionally found about cultivated fields; the song and habit of soaring very similar to that of a Skylark. A nest with three fresh eggs found at Tingri on 7 July. Nest much more compactly built and better concealed than that of the Skylark.—A. F. R. W.]

***Calandrella acutirostris tibetana* Brooks.**

140 ♂ 17.6.21 Tinki Dzong 13,500 ft.; 147 ♂ 18.6.21 Chusha 14,000 ft.; 148, 149 ♂ 19.6.21 Gyanka 13,500 ft.; 152 ♂ 23.6.21, 156 ♂ 25.6.21, 160 juv. 27.6.21, 161 ♀ 27.6.21, 165 ♂ 26.6.21, 171 ♂, 171 a ♀ 28.6.21, 172 ♀ 26.6.21, 197 ♂ 5.7.21, 209 ♂ 8.7.21, 215 ♀ 9.7.21 with

eggs, 218 ♂ 10.7.21 Tingri 14,000 ft.; 265 juv. 6.8.21, 271 juv. 9.8.21 Kharta 12,000 ft.

The Tibetan Short-toed Lark is one of the commonest breeding-birds in southern Tibet, and has been found nesting up to a height of 15,200 ft. In winter it descends to the plains of India.

[One of the commonest birds on the plains. Nests with fresh eggs, evidently a second laying, were found in July; the nest is very similar to that of a Meadow-Pipit.—A. F. R. W.]

***Calandrella brachydactyla dukhunensis* (Sykes).**

365 ♂ 17.9.21 E. Everest 17,000 ft.

The Rufous Short-toed Lark breeds in central Asia and passes through southern Tibet on migration. Colonel Walton saw and obtained specimens at Khamba Dzong, 15,200 ft., in September and October, in which months Blanford also met with it in Sikkim at 16,000 ft.

***Chionospiza nivalis adamsi* (Moore).**

153 ♀ 24.6.21, 158 ♀ 25.6.21, 159 ♂ 27.6.21, 176 ♀ 30.6.21 Tingri 14,000 ft.; 224, 225 juv. 14.7.21 Thung La 16,000 ft.; 227 ♀, 228 ♂ 14.7.21 Thung La 15,000 ft.; 259 ♀ 31.7.21 Rebu 14,800 ft.

In 1852 A. L. Adams discovered this Snow-Finch near the "Lamestry of Lamayeroo" in Ladak, and six years later it was described by F. Moore in the P. Z. S.

Adams's Mountain-Finch breeds at Phari, 14,500 ft., in June, according to Colonel Bailey, and is common in the winter near Khamba Dzong at 15,200 ft. Farther west in Ladak Colonel Ward found young, which had just left the nest, on the Fortu La Pass at 14,000 ft., and Stoliczka observed it near Taglang in Rupshu between 15,000–16,000 ft.

[Generally distributed between 14,000 ft. and 16,000 ft. Nests with young were found in July in old walls and piles of stones.—A. F. R. W.]

Chionospiza blanfordi (Hume).

186 ♂, 187 ♀ 3.7.21 Tingri 14,000 ft.

Blanford's Mountain-Finch was only found in the autumn and winter near Khamba Dzong and Tuna up to 15,200 ft. In July a few were seen on the Karo La Pass and near Lhasa.

Mandelli's native collectors obtained a number of skins in "Tibet" between March and October.

Arnold Pike shot a specimen east of Mangisa Tso in north-west Tibet in June, and there are other skins in the collection from north Tibet.

[One pair only observed; the nest with young found two feet down the burrow of a Pika (*Ochotona curzoniae*).—A. F. R. W.]

Fringilauda brandti hæmatopygia (Gould).

226 ♀ Thung La 15,000 ft.; 234 ♀, 235 ♂ 16.7.21 Nyenyam 13,500 ft.; 341 ♂ 6.9.21 Upper Kharta Valley 17,000 ft.; 348 ♂, 249 ♂ 10.9.21 E. Everest 17,500 ft.; 383 ♀ 22.9.21 E. Everest 17,000 ft.

This Finch, described by Gould in the P.Z.S. for 1851, was said to have been obtained by Lord Gifford in Tibet. In the letterpress to plate 3, vol. v., of the 'Birds of Europe,' Gould states that he is "indebted to Lord Gifford for the loan of this fine bird, which is second in interest only to the new and beautiful *Syrrhaptes tibetanus* also brought back by his lordship." The type-locality of the Sand-Grouse is known to be the Tso Morari Lake in Ladak, and I think we are justified in fixing the same place for Gould's Mountain-Finch.

Dr. Hartert (Vög. pal. Faun. p. 137) considers that the birds from Gilgit to Sikkim are all *hæmatopygia*, which race differs from *brandti* in wanting the red on the lesser wing-coverts and in the darker and more streaked upper-side. According to the series in the British Museum, however, the Gilgit birds agree very closely with those from the Pamirs and Tian Shan, and are neither so dark or streaked

as specimens from Ladak, Kulu and Sikkim, while the red on the lesser wing-coverts seems to be variable.

Fringilauda nemoricola nemoricola Hodgson.

242 ♀ Nyenyam 13,000 ft. ; 248 ♂, 249 ♂ Nyenyam 13,500 ft. ; 250 ♀ 18.7.21 Nyenyam 14,000 ft. ; 356 ♂, 357 ♂ 15.9.21 E. Everest 17,000 ft.

Hodgson's Mountain-Finch ranges from Nepal into China, and to the west of the former country it is replaced by *F. n. altaica*, in which the axillaries are pale ashy and not yellow. Only one example of this Finch was obtained during the Tibet mission and no others were seen, but in the higher parts of Sikkim it is a common bird. The allied race *altaica* was shot by Stoliczka up to 15,000 ft. in north Lahul, and Mr. Osmaston found nests at 13,500 ft. in Garhwal.

Acanthis flavirostris rufostriata (Walton).

145 ♂ 18.6.21 Chola 13,500 ft. ; 193, 196 ♀ 5.7.21, 204 ♀ 6.7.21, 205 ♀ 7.7.21, 219 ♂ 10.7.21 Tingri 14,000 ft.

Walton's Twite has previously been recorded only from the country between Khamba Dzong and Lhasa, where it is common and resident up to 15,200 ft. Mr. Wollaston informs me that he found it local, and confined to where there were patches of cultivation.

Hypacanthus spinoides (Vigors).

292 ♂, 230 ♀, 243 ♂ 17.7.21 Nyenyam 12,500 ft.

The Himalayan Greenfinch has not been recorded before from higher than 10,000 ft. In winter, according to Mr. Osmaston, it descends to the plains at the foot of the hills.

As in the case of the Red-headed Bullfinch, this bird has extended its range up the wooded Nepal valleys into Tibet.

[Seen only at Nyenyam Valley on the border of Nepal, 12,000 ft.—A. F. R. W.]

***Passer rutilans cinnamomeus* (Gould).**

299 ♂ 18.8.21 Kharta 12,500 ft. ; 332 ♂ 31.8.21 Kharta 12,000 ft.

This Tree-Sparrow is found from Chitral to Szechuan, where it meets the typical form *P. rutilans rutilans*, in which the underside is white and not yellow. Colonel Walton records the Cinnamon Tree-Sparrow as a resident and common species between Gyantse and Lhasa, and Colonel Bailey found it breeding at an elevation of 13,000 ft. near the former place, while farther west Stoliczka obtained specimens at Gaora in western Tibet between 12,000 and 15,000 ft.

Dr. Hartert in his Vög. pal. Faun. separates birds from Kashmir and the western Himalaya as *P. rutilans debilis* on account of a difference in colour and smaller size, the wings measuring 70–73 mm. as against 77–79 mm. in *cinnamomeus*.

After carefully comparing the large series in the Museum I can find no constant colour-difference, and, as regards size, thirty-two males from west of Nepal measure 69–74 mm., while twenty from Nepal-Bhutan, including Tibet, have a wing of 72–78 mm. This shows that the Nepal-Bhutan, Tibet, birds are slightly larger; but, on the other hand, twenty-two skins from Assam and Burma measure 68–72 mm. and seven from Yunnan 69–75 mm., so that size is not a very satisfactory character.

Gould specified the type-locality as “apud montes Himalayenses,” but Dr. Hartert, without giving any reason, has restricted it to Bhutan, in spite of the fact that the wing of the type was said to measure $2\frac{3}{4}$ ins. = 70 mm., which is the minimum given for the *debilis* race!

[Seen in flocks in barley-fields, Arun Valley, September.—A. F. R. W.]

***Passer montana*, subsp. ?**

173 ♂ 30.6.21, 177 ♂ 30.6.21, 194 ♂ 5.7.21 Tingri 14,000 ft.

All the specimens of the Tree-Sparrow are so worn

that I have been unable to decide to what race they belong.

[Common in all Tibetan villages and monasteries visited.—A. F. R. W.]

***Carpodacus erythrinus roseatus* (Hodgson).**

237 ♂ 5.7.21 Nyenyam 13,500 ft.; 333 ♀ 2.9.21 Kharta 12,000 ft.

Hodgson's Rose-Finch replaces the common Rose-Finch in India, wintering throughout the peninsula and retiring to the Himalaya and central Asia to nest. At Khamba Dzong, 15,000 ft., this bird was seen and shot by Colonel Walton during October. At Chaksam and Lhasa he obtained two specimens of what he considered was a new species, naming it *Carpodacus latissimus*. This bird, which he says occurred sparingly in the country between the Brahmaputra River and Lhasa, appears to be nothing more than a rather brightly-coloured specimen of *C. e. roseatus*.

Hodgson's Rose-Finch nests along the Himalaya, and on the borders of Tibet and Garhwal; Mr. B. B. Osmaston found a considerable number breeding in the Girthi Valley between 13,000 and 13,500 ft., Stoliczka reported it in Lahul in June at 11,000 to 12,000 ft., and Mr. Baker has eggs taken in the Khagan Valley, N.W. Frontier, between 6500 and 8500 ft.

In the spring the male of *C. e. roseatus* may be distinguished from the typical form by its deeper coloration above and brighter tinge below.

[In cultivated lands about 13,000 ft.—A. F. R. W.]

***Carpodacus pulcherrimus pulcherrimus* (Moore).**

266 ♂ 8.8.21, 285 ♂ 13.8.21, 304 ♂ 18.8.21 Kharta Valley 12,500 ft.; 366 ♀ 6.9.21 Kharta Valley 14,800 ft.

The birds obtained by Mr. Wollaston belong to the typical form of the Beautiful Rose-Finch, which ranges from Sikkim to Garhwal. In the Chumbi Valley and southern Tibet it is replaced by *C. p. waltoni* Sharpe, in which the male is a brighter rose-pink on the sides of the head and underparts, while the female is much paler than the female of the typical

form. In Garhwal and Kumaon there is a closely allied species, *ambiguus* of Hume, but I have only been able to examine one male, the type, a carbolized specimen.

Both species breed in Garhwal, where Mr. Whympere found *ambiguus* nesting at 12,000 ft., but he does not say at what elevation *pulcherrimus* was breeding. Mr. Osmaston, who found the latter bird nesting in the Girthi Valley, states that the nests were at an altitude of 13,000 to 13,500 ft.

***Carpodacus severtzovi* Sharpe.**

143 ♂ 18.6.21 Chusa 13,500 ft., 232 ♂ 16.7.21 Nyenyam 12,500 ft.

Sharpe gives the type-locality of this bird as "Turkestan and Yarkand," but nowhere does he designate a type. The first birds mentioned in the 'Catalogue of Birds' are carbolized specimens from the hill country south of Yarkand, and next come several skins from Kashgar presented by Dr. Bellew to the H.E.I. Co. Museum—afterwards transferred to the British Museum,—and one of these, no. 80.1.1.3511, I designate as the type.

As both *C. severtzovi* and *C. rubecilloides* are found in the same locality during the breeding-season, they cannot both be subspecies, as considered by Dr. Hartert.

This bird breeds commonly in southern Tibet, and Colonels Bailey and Steen found nests at 14,000 ft. near Gyantse.

***Carpodacus rubecilloides* Przew.**

142 ♂ 8.6.21 Chusha 13,500 ft.; 231 ♂ 16.7.21 Nyenyam 13,500 ft.; 268 ♀ 9.8.21 Kharta 12,000 ft.; 274 ♂, 286 ♂, 287 ♀ 14.8.21 Kharta 12,500 ft.

Specimens of Przewalski's Rose-Finch were obtained by Colonel Walton up to 15,200 ft. in southern Tibet during December, April, and May, and he states that its distribution coincides with that of *C. severtzovi*.

Dr. W. L. Abbott met with this Rose-Finch in July on the Khardong and Sassu Passes, Ladak, at 16,000 ft., and von Pelzeln mentions that Stoliczka procured it at Parang below the Spiti-Rupshu Pass at 17,000 ft.

Pyrrhospiza punicea punicea Hodgson. (Pl. VII.)

253 ♂, 255 ♀ 25.7.21 Lapchikang 16,800 ft.; 340 ♂, 338, 339 imm. 6.9.21 Upper Kharta Valley 17,300 ft.; 351 imm. 11.9.21, 359 imm. 16.9.21 E. Everest 17,500 ft.; 871 ♂ 18.9.21 E. Everest 17,000 ft.

This fine Rose-Finch frequents the higher ranges of the Himalaya in summer, retiring lower down in winter. It is found in Sikkim, southern Tibet, and Nepal, and in the north-west Himalaya and Kashmir is replaced by a paler bird, *P. p. humii*.

Blanford obtained specimens of the Red-breasted Rose-Finch at 14,000 ft. on the Chola Range, Sikkim; but neither Colonels Walton, Bailey, nor Steen seem to have met with it, though Mr. Stuart Baker says it breeds in the Chumbi Valley.

The western race, *humii*, has been found nesting in the Nila Valley, Garhwal, not far from the Borrendia Pass, by Mr. Whympers, and in 1881 Major C. H. T. Marshall saw a pair of old birds feeding fully-fledged young in the Sauch Pass, Chamba; Stoliczka says this bird is found in Spiti and Ladak from 13,000 to 17,000 ft. in summer.

[A bird of the high mountains, never seen below 16,000 ft.—A. F. R. W.]

Pyrrhula erythrocephala Vigors.

295 (♀) ♂ 17.8.21 Kharta 12,500 ft.; 316 ♂, 217 ♀, 318 ♀, 320 ♀ 25.8.21 Kama Valley 10,000 ft.

The Red-headed Bullfinch is confined to the Himalaya, and the birds obtained by Mr. Wollaston must have spread up the Arun Valley from Nepal.

Mr. S. L. Whympers found this Bullfinch breeding in Garhwal at an elevation of 12,000 ft., but, according to Stoliczka, it sometimes nests near Kotegurh 6000 ft. lower.

[Only found in the pine and juniper forests of Kama and Arun Valleys up to 12,000 ft.—A. F. R. W.]

Emberiza cia godlewskii Tacz.

279 ♂ 11.8.21, 282 ♂, 283 ♂ 12.8.21, 289 ♀, 290 ♂

14.8.21, 294 ♂ 15.8.21, 305 ♂ 9.8.21, 301 ♀ 21.8.21 Kharta
12,500 ft.

Godlewski's Meadow-Bunting is found from northern China and Mongolia to Chinese Turkestan, where Biddulph obtained several specimens in the Kirog Valley and Dr. Abbott met with it at the Tangitan defile. It has not previously been recorded from southern Tibet, though Colonel Walton saw a Bunting in Lhasa with a streaked head, which may have been this species.

The birds seen by Mr. Wollaston must have come from farther north, and possibly they pass the winter in some of the lower valleys adjoining the Nepal border.

[Many observed migrating through Arun Valley in August and September.—A. F. R. W.]

***Pyrrhonorax pyrrhonorax* (Linn.).**

150 ♂ 26.6.21 Kishong 13,500 ft.

The Common Chough of the Himalaya was described by Gould, on account of its large size, as a new species under the name *Fregilus himalayanus*. The type, which was formerly in the H.E.I. Co. Museum, was collected by Strachey in Kumaon, and has a wing measuring 321 mm.

In trying to decide whether this is a good race or not, I have measured most of the birds in the British Museum, and the result shows that no satisfactory division can be made. With better material—few of the Museum birds are sexed—this may not, however, be the case:—

	No. of specimens.	Range. mm.	Average. mm.
British Isles *	12	260-293	270
Europe	10	254-305	280
Canary Is.	4	258-280	269
Africa *	12	275-310	287
Asia Minor-Persia	11	280-318	301
Afghanistan-Baluchistan	8	267-316	286
Kashmir-Kumaon	33	290-336	310
Sikkim-Bhutan	31	284-323	304
S. Tibet	5	301-350	319
Turkestan.....	7	270-321	297
China	23	260-314	288

* Measurements supplied by Mr. H. F. Witherby.

Colonel Walton describes this species as very common up to 15,200 ft. in all the country visited and remarks on the large size of his specimens, one of which, a male, has a wing of 350 mm.

Biddulph, as quoted by Sharpe, says: "I think I saw this and the Alpine Chough up to the greatest heights ascended—say, nearly 20,000 ft."

[Generally distributed. Nest found with half-grown fledglings at Tinki Dzong, 16 June. Several visited our camp at 20,000 ft., on Mt. Everest in September.—A. F. R. W.]

Podoces humilis Hume.

144 ♂ 18.6.21 Chus La 13,500 ft.; 168 ♂ 26.6.21, 169 ♀ 28.6.21, 192 ♀ 4.7.21 Tingri 14,000 ft.

This Ground-Chough was described by Hume from specimens obtained by Dr. George Henderson on the Sanju Pass during the first Yarkand Mission.

At Khamba Dzong, 15,200 ft., and various places on the way to Lhasa, Colonel Walton found the Brown Ground-Chough not uncommon, but confined to bare and uncultivated land. Though this bird has been noticed within a mile of the Kangra Lama Pass, on the frontier between Sikkim and Tibet, it has not been recorded within the limits of the former country.

Colonel Steen, I.M.S., found several nests near Gyantse, the eggs from which he sent to Dresser.

[Generally distributed. Nests found in holes in the ground or old mud-walls. Young birds on 18 June and later.—A. F. R. W.]

XXX.—*The Birds of Sind.* (Part i.) By CLAUD B. TICEHURST, M.D., M.A., M.B.O.U., late Capt. R.A.M.C.

(Plate VIII.)

FROM 19 October, 1917, to 14 January, 1920, I was stationed at Karachi, the City of the Desert, and the port and capital of Sind. My spare time was devoted to ornithology. At first I intended to write merely a local avifauna of the



PYRRHOSPIZA PUNICEA PUNICEA